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| 10/018,574 | 12/20/2001 | Yuri Iwano | 1907-0205P | 5010 |

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| EXAMINER |
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SONG, JASMINE

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| ART UNIT | PAPER NUMBER |
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2188

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,574

Applicant(s)

IWANO, YURI

Examiner

Jasmine Song

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 and 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

1. This office action is in response to Amendment B, filed 09/29/2003, paper #8. Claims 1-7 are still pending. All rejections and objections not explicitly repeated below are withdrawn.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Gotoh et al., U.S. Patent 6,292,625 B1.

Regarding claim 1, Gotoh teaches that a disk medium managing method for managing data to be recorded on a disk medium (col.2, lines 9-12) by file format (Fig.8 or Fig.22, col.7, lines 47-52) and representing a hierarchical structure by directories (Fig.8 or Fig.22), comprising: pre-defining an area (Fig.2, step B3 and C2 of Fig.3, data structure before AV data recording, the continuous area at LBN 83 to end is considered as pre-defining area) on the disk medium as a directory (Fig.8, Root directory), and recording files and directories (Fig.8 or Fig.22) within the area defined as the directory (C3 of Fig.3, data structure after AV data recording).

Regarding claim 2, Gotoh teaches further comprising hierarchically pre-defining a further directory (Fig.8, directory A) in an area (Fig.2, step B3 and Fig.3, a continuous free area of 5 MB or larger is searched, such as the continuous area at LBNs 592-3567 and the continuous area at LBN 3888 to the end are searched for as the continuous free area for recording AV files, the continuous area at LBN 3586-3887 or recording file B, col.10, lines 60-65) within the area pre-defined on the disk medium as the directory.

Regarding claim 3, Gotoh teaches further comprising selectively deciding whether the area is pre-defined on the disk medium or not (C2 of Fig.3).

Regarding claim 4, Gotoh teaches that wherein hierarchical definition of the directory for pre-defining the area on the disk medium is restricted by ^{that the} ~~the~~ directory (Fig.8, directory A) must be defined under a directory having a pre-defined area on the disk medium (Fig.8, root directory).

Regarding claim 5, Gotoh teaches that wherein the area pre-defined on the disk medium is continuously arranged thereon (Fig.2, step B3 and B7, Fig.3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al., U.S. Patent 6,292,625 B1, in view of Walker., U.S. Patent 6,134,586.

Regarding claims 6 and 7, Gotoh teaches the claimed invention as noted above (claim 1), Gotoh does not teach that calculating a maximal time of seeking data in the areas pre-defined on the disk medium and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium and calculating an area on the disk medium satisfying the specified allowable seek time as disclosed in the

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Specification, page 18 to 19. However, Walker teaches that calculating a maximal time of seeking data in the areas pre-defined on the disk medium (the maximum seek time as disclosed in the col.3, lines 22-23 and col.4, lines 17-18) and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium (the maximum average seek time as disclosed in the col.3, lines 27-32) and calculating an area on the disk medium satisfying the specified allowable seek time is taught as the maximum average seek time can be reduced to about half the maximum seek time (col.3, lines 30-32). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Walker in the system of Gotoh and utilize the longest seek time for seeking the data in the area on the disk and make sure the time to record the data between two different locations is less than the specified allowable seek time because it would reduce the seek time by dividing up the storage area of the disk into multiple-ring shaped zones (col.3, lines 27-32) and provide the maximum efficiency of reading or writing.

Accordingly, one of ordinary skill in the art would have recognized this and concluded that they are from the same field of endeavor. This would have motivated one of ordinary skill in the art to implement the above combination for the advantage set forth above.

Response to Applicant's Arguments

7. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

10. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 703-305-7701. The examiner can normally be reached on 8:00-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703-306-2903. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Jasmine Song 

Patent Examiner

December 3, 2003


12/12/03

Mano Padmanabhan

Supervisory Patent Examiner

Technology Center 2100